

Title (en)  
METHODS, COMPUTER PROGRAMS, AND APPARATUSES FOR A COMMAND CENTER AND A VEHICLE, A VEHICLE AND A COMMAND CENTER FOR DELAY COMPENSATION IN TELEOPERATED DRIVING

Title (de)  
VERFAHREN, COMPUTERPROGRAMME UND VORRICHTUNGEN FÜR EIN BEFEHLSZENTRUM UND FAHRZEUG, FAHRZEUG UND BEFEHLSZENTRUM FÜR VERZÖGERUNGSKOMPENSATION BEIM TELEOPERIERTEN FAHREN

Title (fr)  
PROCÉDÉS, PROGRAMMES INFORMATIQUES ET APPAREILS POUR UN CENTRE DE COMMANDE ET UN VÉHICULE, VÉHICULE ET CENTRE DE COMMANDE POUR COMPENSER LES RETARDS EN CONDUITE TÉLÉOPÉRÉE

Publication  
**EP 3772226 A1 20210203 (EN)**

Application  
**EP 19189108 A 20190730**

Priority  
EP 19189108 A 20190730

Abstract (en)  
Embodiments provide methods, computer programs, and apparatuses for a command center and a vehicle, a vehicle and command center. The method (10) for a command center, which is configured to teleoperate a vehicle, comprises receiving (12) input data from the vehicle and estimating (14) a current uplink delay based on the input data from the vehicle. The method (10) further comprises determining (16) an estimated downlink and uplink delay based on the input data and the estimated current uplink delay, and determining (18) control information for the vehicle which allows to at least partly compensate the estimated downlink and uplink delay. The method (10) further comprises transmitting (19) information related to the control information to the vehicle.

IPC 8 full level  
**H04W 4/44** (2018.01); **G05D 1/00** (2006.01)

CPC (source: CN EP KR US)  
**B60W 40/02** (2013.01 - KR); **B60W 60/001** (2020.02 - KR); **G05D 1/0011** (2024.01 - US); **G05D 1/0022** (2024.01 - EP); **H04L 67/12** (2013.01 - CN); **H04L 67/125** (2013.01 - CN); **H04W 4/40** (2018.02 - CN); **H04W 4/44** (2018.02 - EP); **H04W 56/0045** (2013.01 - US); **H04W 56/0065** (2013.01 - US); **B60W 2050/0064** (2013.01 - KR); **B60W 2556/55** (2020.02 - KR)

Citation (applicant)

- EP 2865495 A1 20150429 - HARRIS CORP [US]
- EP 0865496 A1 19980923 - UNILEVER NV [NL], et al
- EP 3339999 A2 20180627 - PANASONIC IP CORP AMERICA [US]

Citation (search report)

- [A] US 2019168769 A1 20190606 - ZHU FAN [US], et al
- [A] US 2017230803 A1 20170810 - CALABUIG GASPARD JORDI [ES], et al

Cited by  
WO2022171700A1; EP4040817A1; CN113900431A; EP4002044A1; WO2023280826A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3772226 A1 20210203; EP 3772226 B1 20230125**; CN 112311848 A 20210202; CN 112311848 B 20240528; KR 102366545 B1 20220223; KR 20210014594 A 20210209; US 11147035 B2 20211012; US 2021037495 A1 20210204

DOCDB simple family (application)  
**EP 19189108 A 20190730**; CN 202010750729 A 20200730; KR 20200094318 A 20200729; US 202016943565 A 20200730